

# *iPOLiS*



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## Samsung Compact Network System

Ideal Network Solution for Small Application

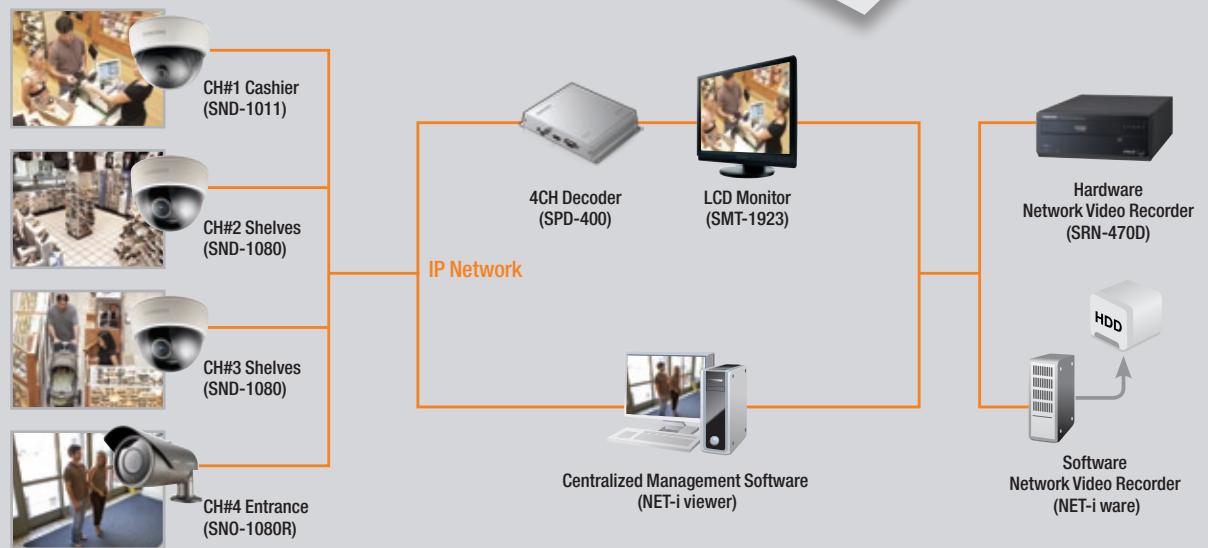
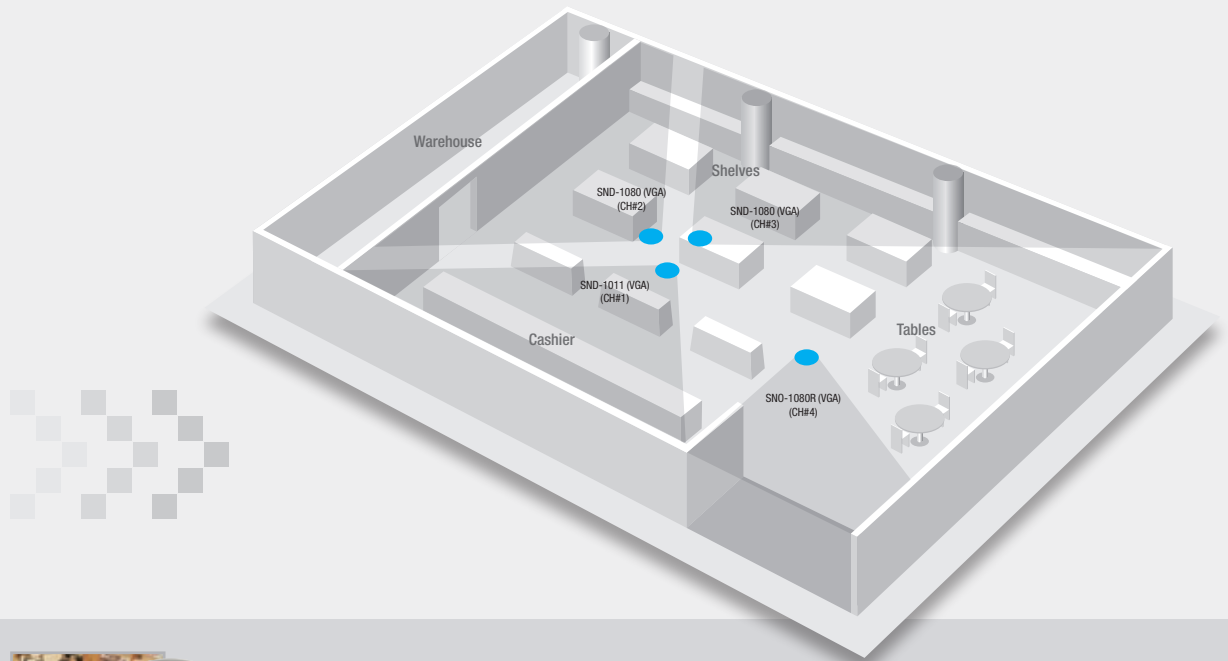


# WiseNetS Network Solution

Ideal Network Solution for Small Application  
Samsung Compact Network System

## Application Example for Convenience Store

For the monitoring of inside of a store, mini dome cameras such as SND-1080 and SND-1011 can be installed. The enter/exit can be monitored with SNO-1080R IR camera which can capture images even in total darkness. WiseNetS range cameras offer a range of selection pool and users can pick the solution fits their needs.

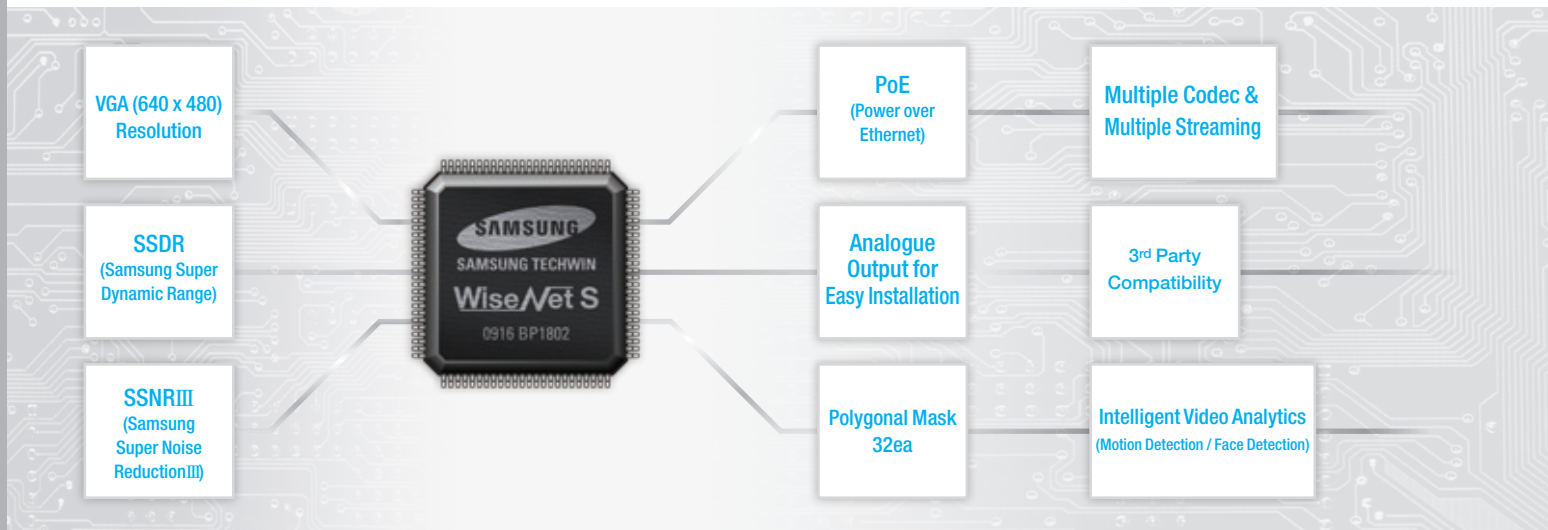


Samsung Techwin adds VGA network cameras to its iPOLiS network solution range, which will be the ideal solution for small to medium size applications. The SNB-1001 fixed camera, the SND-1080 and SND-1011 internal mini dome cameras, SNO-1080R IR camera, and the SNV-1080 vandal resistant dome all utilizes WiseNetS DSP chipset, the latest DSP for network cameras from Samsung. The WiseNetS range cameras provide compact design making it suitable for any application, but high technologies from other WiseNet DSPs.

The WiseNetS series cameras can compose the whole network security solution for small application such as retail store, when combined with Samsung's NVR and CMS (Centralized Monitoring Software).



# WiseNetS DSP Technology



## VGA Resolution Support

The WiseNetS cameras provides VGA (640 x 480) resolution. Although megapixel and HD cameras have many advantages, there are applications that VGA cameras are best-suited. It is important to consider the whole system and environment when choose the efficient network camera.



## SSDR (Samsung Super Dynamic Range)

Useful in high contrast or backlight scene. Automatically lighten the dark areas within a scene whilst maintaining the brighter areas at the same level. This ensures that the dark areas become more visible allowing the operator to view objects in the shadows.



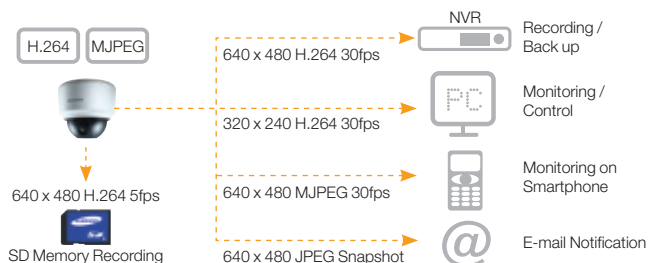
## SSNRIII (Samsung Super Noise ReductionIII)

Useful in low light condition. This technology eliminates image noise in low light conditions without creating image blur or ghosting.



## Multiple Codec & Multiple Streaming

The WiseNet network cameras support simultaneous streaming of multiple video compression technologies such as H.264 and MJPEG. This facilitates multiple purposes monitoring such as real-time, highquality or high-efficiency recording, mobile monitoring, E-mail notification and SD memory recording.



## Polygonal Mask 32ea

The WiseNetS supports up to 32 polygon shaped privacy masks so that it efficiently prevents invasion of privacy under various surveillance environments.

## Analogue Output for Easy Installation

To provide analog video output port enabling conventional analog control device connection for easy installation such as focus and view angle adjustment. The installers do not need to carry Note-PC when he installs network cameras.



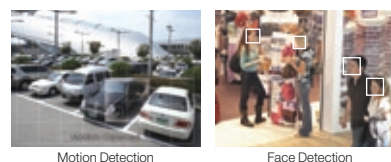
## PoE (Power over Ethernet)

Power over Ethernet feature offers an easy, fast and cost-effective solution for supplying power to network cameras without the need to install power outlets and electrical cabling.



## Intelligent Video Analytics (Motion Detection, Face Detection)

Intelligent video analytics can be used for efficient monitoring. WiseNetS cameras provide Motion Detection which detects a change occurred in predefined areas in the field of view, and Face Detection to detect up to 35 faces in the scene.



## 3rd Party Compatibility

Samsung is continuously expanding the partnership with important ISVs in worldwide to achieve the strong compatibility of network cameras. The WiseNetS range cameras and domes are planned to be compatible with Samsung's technical partners of leading third party software platforms.

# SNB-1001

VGA Network Camera

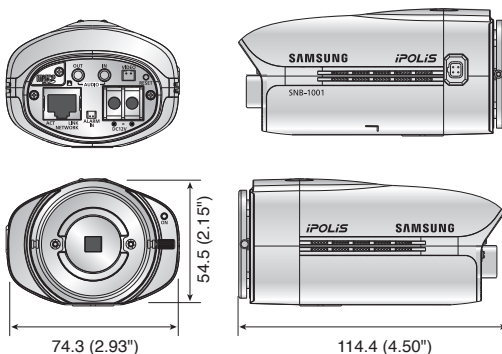


## Key Features

- 30fps at VGA (640 x 480) resolution
- H.264, MJPEG dual codec
- Multiple streaming
- Day & Night function (Software)
- SSDR, SSNRIII
- PoE, Micro SD slot, Bi-directional audio
- Motion detection, Face detection
- Alarm input 1ea, Analog output (DIP)

## Dimensions

Unit : mm (inch)



## Technical Specifications

	SNB-1001N	SNB-1001P
VIDEO		
Imaging Device	1/4" PS CMOS	
Total Pixels	680(H) x 512(V)	
Effective Pixels	640(H) x 480(V)	
Scanning System	Progressive	
Min. Illumination	0.7Lux (F1.2)	
S / N Ratio	50dB	
Video Out	DIP connector type, for installation	
LENS		
Lens Type	Manual / DC auto iris	
Mount Type	C / CS	
OPERATIONAL		
Camera Title	Off / On (Displayed up to 15 characters)	
Day & Night	Auto (S/W) / Color / B/W / External B/W	
Backlight Compensation	Off / BLC	
Contrast Enhancement	SSDR (Samsung Super Dynamic Range) (Off / On)	
Digital Noise Reduction	SSNRIII (2D+3D noise filter) (Off / On)	
Motion Detection	Off / On (4 programmable zones)	
Privacy Masking	Off / On (32ea 4 points polygonal)	
Sens-up (Frame Integration)	Off / Auto (2x ~ 60x)	
Gain Control	Off / Low / Medium / High	
White Balance	ATW / AWC / Manual / Indoor / Outdoor	
Electronic Shutter Speed	Auto / A.FLK / Manual (60x ~ 1/12000sec)	
Flip / Mirror	Off / On	
Intelligent Video Analytics	Face detection	
Alarm I/O	Input 1ea	
NETWORK		
Ethernet	RJ-45 (10/100BASE-T)	
Video Compression Format	H.264, MJPEG	
Resolution	4 : 3 Mode - 640 x 480 / 320 x 240 / 160 x 120	
Max. Framerate	Max. 30fps at all resolutions	
Video Quality Adjustment	H.264 : Compression level, Target bitrate level control MJPEG : Quality level control	
Bitrate Control Method	H.264 : CBR or VBR, MJPEG : VBR	
Streaming Capability	Multiple streaming (Up to 10 profiles)	
Audio I/O	Mic/Line in , Line out	
Audio Compression Format	G.711 u-law	
Audio Communication	Bi-directional audio	
IP	IPv4, IPv6	
Protocol	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, ONVIF	
Security	HTTPS(SSL) login authentication, Digest login authentication IP address filtering, User access log, 802.1x Authentication	
Streaming Method	Unicast / Multicast	
Max. User Access	5 users at unicast mode	
Memory Slot	Micro, SD/SDHC memory slot	
ONVIF Conformance	Yes	
Webpage Language	English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatian, Hungarian, Greek	
Web Viewer	Supported OS : Windows XP / VISTA / 7, MAC OS Supported Browser : Internet Explorer 7.0 or Higher, Firefox, Google Chrome, Apple Safari	
Central Management Software	NET-i viewer	
ENVIRONMENTAL		
Operating Temperature / Humidity	-10℃ ~ +50℃ (+14ℱ ~ +122ℱ) / 20% ~ 80% RH	
ELECTRICAL		
Input Voltage / Current	12V DC / PoE (IEEE802.3af)	
Power Consumption	Max. 5W	
MECHANICAL		
Color / Material	Black, Silver / Aluminium, Plastic	
Dimensions (WxHxD)	74.3 x 54.5 x 114.4mm (2.93" x 2.15" x 4.50") excluding projections	
Weight	190g (0.42 lb)	

# SND-1080

VGA Network Varifocal Dome Camera

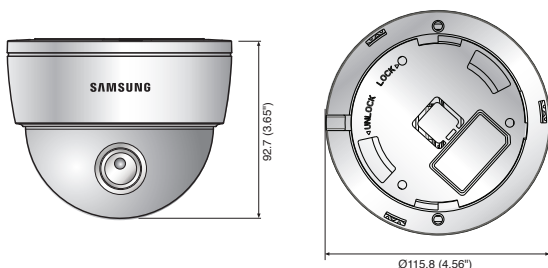


## Key Features

- 30fps at VGA (640 x 480) resolution
- 2.2 ~ 7.7mm (3.5x) varifocal lens
- H.264, MJPEG dual codec
- Multiple streaming
- Day & Night function (Software)
- SSDR, SSNRIII
- PoE, Micro SD slot, Bi-directional audio
- Motion detection, Face detection
- Alarm input 1ea, Analog output (DIP)

## Dimensions

Unit : mm (inch)



## Technical Specifications

	SND-1080N	SND-1080P
VIDEO		
Imaging Device	1/4" PS CMOS	
Total Pixels	680(H) x 512(V)	
Effective Pixels	640(H) x 480(V)	
Scanning System	Progressive	
Min. Illumination	0.7Lux (F1.2)	
S / N Ratio	50dB	
Video Out	DIP connector type, for installation	
LENS		
Focal Length (Zoom Ratio)	2.2 ~ 7.7mm (3.5x) varifocal	
Max. Aperture Ratio	F1.2	
Angular Field of View	H : 94°(Wide) ~ 26.5°(Tele), V : 70°(Wide) ~ 20°(Tele)	
Min. Object Distance	500mm (1.64ft)	
Lens Type	DC auto iris	
Mount Type	Board type (Ø14)	
PAN / TILT / ROTATE		
Pan Range	0° ~ 355°	
Tilt Range	17° ~ 90°	
Rotate Range	0° ~ 355°	
OPERATIONAL		
Camera Title	Off / On (Displayed up to 15 characters)	
Day & Night	Auto (S/W) / Color / B/W / External B/W	
Backlight Compensation	Off / BLC	
Contrast Enhancement	SSDR (Samsung Super Dynamic Range) (Off / On)	
Digital Noise Reduction	SSNRIII (2D+3D noise filter) (Off / On)	
Motion Detection	Off / On (4 programmable zones)	
Privacy Masking	Off / On (32ea 4 points polygonal)	
Sens-up (Frame Integration)	Off / Auto (2x ~ 60x)	
Gain Control	Off / Low / Medium / High	
White Balance	ATW / AWC / Manual / Indoor / Outdoor	
Electronic Shutter Speed	Auto / A.FLK / Manual (60x ~ 1/12000sec)	
Flip / Mirror	Off / On	
Intelligent Video Analytics	Face detection	
Alarm I/O	Input 1ea	
NETWORK		
Ethernet	RJ-45 (10/100BASE-T)	
Video Compression Format	H.264, MJPEG	
Resolution	4 : 3 Mode - 640 x 480 / 320 x 240 / 160 x 120	
Max. Framerate	Max. 30fps at all resolutions	
Video Quality Adjustment	H.264 : Compression level, Target bitrate level control MJPEG : Quality level control	
Bitrate Control Method	H.264 : CBR or VBR, MJPEG : VBR	
Streaming Capability	Multiple streaming (Up to 10 profiles)	
Audio I/O	Mic/Line in , Line out	
Audio Compression Format	G.711 u-law	
Audio Communication	Bi-directional audio	
IP	IPv4, IPv6	
Protocol	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, ONVIF	
Security	HTTPS(SSL) login authentication, Digest login authentication IP address filtering, User access log, 802.1x Authentication	
Streaming Method	Unicast / Multicast	
Max. User Access	5 users at unicast mode	
Memory Slot	Micro, SD/SDHC memory slot	
ONVIF Conformance	Yes	
Webpage Language	English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatian, Hungarian, Greek	
Web Viewer	Supported OS : Windows XP / VISTA / 7, MAC OS Supported Browser : Internet Explorer 7.0 or Higher, Firefox, Google Chrome, Apple Safari	
Central Management Software	NET-i viewer	
ENVIRONMENTAL		
Operating Temperature / Humidity	-10°C ~ +50°C (+14°F ~ +122°F) / 20% ~ 80% RH	
ELECTRICAL		
Input Voltage / Current	12V DC / PoE (IEEE802.3af)	
Power Consumption	Max. 5W	
MECHANICAL		
Color / Material	Ivory / Plastic	
Dimensions (WxH)	Ø115.8 x 92.7mm (Ø4.56" x 3.65")	
Weight	380g (0.84lb)	

# SND-1011

VGA Network Fixed Dome Camera

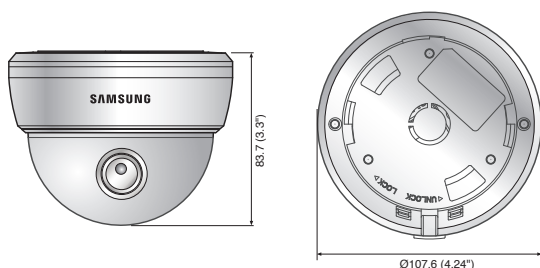


## Key Features

- 30fps at VGA (640 x 480) resolution
- Built-in 3mm fixed lens
- H.264, MJPEG dual codec
- Multiple streaming
- Day & Night function (Software)
- SSDR, SSNRIII
- Motion detection, Face detection
- Alarm input 1ea, Analog output (DIP)

## Dimensions

Unit : mm (inch)



## Technical Specifications

	SND-1011N	SND-1011P
VIDEO		
Imaging Device	1/4" PS CMOS	
Total Pixels	680(H) x 512(V)	
Effective Pixels	640(H) x 480(V)	
Scanning System	Progressive	
Min. Illumination	0.7Lux (F1.2)	
S / N Ratio	50dB	
Video Out	DIP connector type, for installation	
LENS		
Focal Length (Zoom Ratio)	3mm fixed	
Max. Aperture Ratio	F2.0	
Angular Field of View	H : 70°, V : 50°	
Min. Object Distance	40mm (0.13ft)	
Mount Type	Board type	
PAN / TILT / ROTATE		
Pan Range	0° ~ 355°	
Tilt Range	17° ~ 90°	
Rotate Range	0° ~ 355°	
OPERATIONAL		
Camera Title	Off / On (Displayed up to 15 characters)	
Day & Night	Auto (S/W) / Color / B/W / External B/W	
Backlight Compensation	Off / BLC	
Contrast Enhancement	SSDR (Samsung Super Dynamic Range) (Off / On)	
Digital Noise Reduction	SSNRIII (2D+3D noise filter) (Off / On)	
Motion Detection	Off / On (4 programmable zones)	
Privacy Masking	Off / On (32ea 4 points polygonal)	
Sens-up (Frame Integration)	Off / Auto (2x ~ 60x)	
Gain Control	Off / Low / Medium / High	
White Balance	ATW / AWC / Manual / Indoor / Outdoor	
Electronic Shutter Speed	Auto / A.FLK / Manual (60x ~ 1/12000sec)	
Flip / Mirror	Off / On	
Intelligent Video Analytics	Face detection	
Alarm I/O	Input 1ea	
NETWORK		
Ethernet	RJ-45 (10/100BASE-T)	
Video Compression Format	H.264, MJPEG	
Resolution	4 : 3 Mode - 640 x 480 / 320 x 240 / 160 x 120	
Max. Framerate	Max. 30fps at all resolutions	
Video Quality Adjustment	H.264 : Compression level, Target bitrate level control MJPEG : Quality level control	
Bitrate Control Method	H.264 : CBR or VBR, MJPEG : VBR	
Streaming Capability	Multiple streaming (Up to 10 profiles)	
IP	IPv4, IPv6	
Protocol	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, ONVIF	
Security	HTTPS(SSL) login authentication, Digest login authentication IP address filtering, User access log, 802.1x Authentication	
Streaming Method	Unicast / Multicast	
Max. User Access	5 users at unicast mode	
Memory Slot	Micro, SD/SDHC memory slot	
ONVIF Conformance	Yes	
Webpage Language	English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatian, Hungarian, Greek	
Web Viewer	Supported OS : Windows XP / VISTA / 7, MAC OS Supported Browser : Internet Explorer 7.0 or Higher, Firefox, Google Chrome, Apple Safari	
Central Management Software	NET-i viewer	
ENVIRONMENTAL		
Operating Temperature / Humidity	-10°C ~ +50°C (+14°F ~ +122°F) / 20% ~ 80% RH	
ELECTRICAL		
Input Voltage / Current	12V DC / PoE (IEEE802.3af)	
Power Consumption	Max. 5W	
MECHANICAL		
Color / Material	Ivory / Plastic	
Dimensions (WxH)	Ø107.6 x 83.7mm (Ø4.24" x 3.3")	
Weight	285g (0.63 lb)	



# SNO-1080R

VGA Weatherproof Network IR Camera

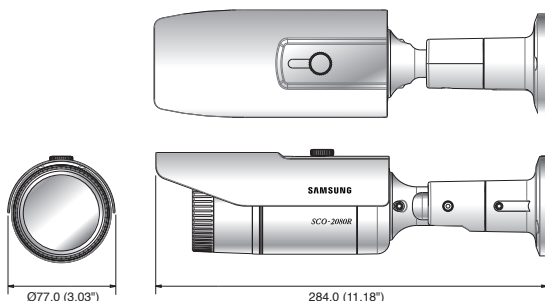


## Key Features

- 30fps at VGA (640 x 480) resolution
- 2.3 ~ 7.9mm (3.4x) varifocal lens
- H.264, MJPEG dual codec
- Multiple streaming
- Day & Night function (Software)
- Built-in IR LED 15ea, IR working distance 15m
- SSSDR, SSNR III
- Motion detection, Face detection
- Alarm input 1ea, Analog output (DIP)

## Dimensions

Unit : mm (inch)



## Technical Specifications

	SNO-1080RN	SNO-1080RP
VIDEO		
Imaging Device	1/4" PS CMOS	
Total Pixels	680(H) x 512(V)	
Effective Pixels	640(H) x 480(V)	
Scanning System	Progressive	
Min. Illumination	0.7Lux (F1.2)	
S / N Ratio	50dB	
Video Out	DIP connector type, for installation	
LENS		
Focal Length (Zoom Ratio)	2.3 ~ 7.9mm (3.4x) varifocal	
Max. Aperture Ratio	F1.2	
Angular Field of View	H : 94°(Wide) ~ 26.5°(Tele), V : 70°(Wide) ~ 20°(Tele)	
Min. Object Distance	500mm (1.64ft)	
Lens Type	DC auto iris	
Mount Type	Board type (Ø14)	
OPERATIONAL		
IR LED	15ea	
Viewable Length	15m	
Camera Title	Off / On (Displayed up to 15 characters)	
Day & Night	Auto (S/W) / Color / B/W	
Backlight Compensation	Off / BLC	
Contrast Enhancement	SSDR (Samsung Super Dynamic Range) (Off / On)	
Digital Noise Reduction	SSNRIII (2D+3D noise filter) (Off / On)	
Motion Detection	Off / On (4 programmable zones)	
Privacy Masking	Off / On (32ea 4 points polygonal)	
Sens-up (Frame Integration)	Off / Auto (2x ~ 60x)	
Gain Control	Off / Low / Medium / High	
White Balance	ATW / AWC / Manual / Indoor / Outdoor	
Electronic Shutter Speed	Auto / A.FLK / Manual (60x ~ 1/12000sec)	
Flip / Mirror	Off / On	
Intelligent Video Analytics	Face detection	
Alarm I/O	Input 1ea	
NETWORK		
Ethernet	RJ-45 (10/100BASE-T)	
Video Compression Format	H.264, MJPEG	
Resolution	4 : 3 Mode - 640 x 480 / 320 x 240 / 160 x 120	
Max. Framerate	Max. 30fps at all resolutions	
Video Quality Adjustment	H.264 : Compression level, Target bitrate level control MJPEG : Quality level control	
Bitrate Control Method	H.264 : CBR or VBR, MJPEG : VBR	
Streaming Capability	Multiple streaming (Up to 10 profiles)	
IP	IPv4, IPv6	
Protocol	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, ONVIF	
Security	HTTPS(SSL) login authentication, Digest login authentication IP address filtering, User access log, 802.1x Authentication	
Streaming Method	Unicast / Multicast	
Max. User Access	5 users at unicast mode	
ONVIF Conformance	Yes	
Webpage Language	English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatian, Hungarian, Greek	
Web Viewer	Supported OS : Windows XP / VISTA / 7, MAC OS Supported Browser : Internet Explorer 6.0 or Higher, Firefox, Google Chrome, Apple Safari	
Central Management Software	NET-i viewer	
ENVIRONMENTAL		
Operating Temperature / Humidity	-10°C ~ +50°C (+14°F ~ +122°F) / 20% ~ 80% RH	
ELECTRICAL		
Input Voltage / Current	12V DC / PoE (IEEE802.3af)	
Power Consumption	Max. 7W	
MECHANICAL		
Color / Material	Dark gray / ALDC	
Dimensions (WxHxD)	Ø77.0 x 216.0mm (Ø3.03" x 8.5") (Bracket angle 90°), 284.0mm (11.18") (Bracket angle 180°)	
Weight	1Kg (2.2 lb)	

# SNV-1080

VGA Vandal-Resistant Network Varifocal Dome Camera

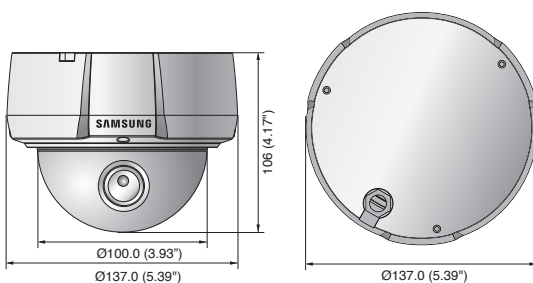


## Key Features

- 30fps at VGA (640 x 480) resolution
- 2.2 ~ 7.7mm (3.5x) varifocal lens
- H.264, MJPEG dual codec
- Multiple streaming
- Day & Night function (Software)
- SSSDR, SSNRIII
- PoE, IP66, Micro SD slot, Bi-directional audio
- Motion detection, Face detection
- Alarm input 1ea, Analog output (DIP)

## Dimensions

Unit : mm (inch)



## Technical Specifications

	SNV-1080N	SNV-1080P
VIDEO		
Imaging Device	1/4" PS CMOS	
Total Pixels	680(H) x 512(V)	
Effective Pixels	640(H) x 480(V)	
Scanning System	Progressive	
Min. Illumination	0.7Lux (F1.2)	
S / N Ratio	50dB	
Video Out	DIP connector type, for installation	
LENS		
Focal Length (Zoom Ratio)	2.2 ~ 7.7mm (3.5x) varifocal	
Max. Aperture Ratio	F1.2	
Angular Field of View	H : 94°(Wide) ~ 26.5°(Tele), V : 70°(Wide) ~ 20°(Tele)	
Min. Object Distance	500mm (1.64ft)	
Lens Type	DC auto iris	
Mount Type	Board type (Ø14)	
PAN / TILT / ROTATE		
Pan Range	0° ~ 355°	
Tilt Range	17° ~ 90°	
Rotate Range	0° ~ 355°	
OPERATIONAL		
Camera Title	Off / On (Displayed up to 15 characters)	
Day & Night	Auto (S/W) / Color / B/W / External B/W	
Backlight Compensation	Off / BLC	
Contrast Enhancement	SSDR (Samsung Super Dynamic Range) (Off / On)	
Digital Noise Reduction	SSNRIII (2D+3D noise filter) (Off / On)	
Motion Detection	Off / On (4 programmable zones)	
Privacy Masking	Off / On (32ea 4 points polygonal)	
Sens-up (Frame Integration)	Off / Auto (2x ~ 60x)	
Gain Control	Off / Low / Medium / High	
White Balance	ATW / AWC / Manual / Indoor / Outdoor	
Electronic Shutter Speed	Auto / A.FLK / Manual (60x ~ 1/12000sec)	
Flip / Mirror	Off / On	
Intelligent Video Analytics	Face detection	
Alarm I/O	Input 1ea	
NETWORK		
Ethernet	RJ-45 (10/100BASE-T)	
Video Compression Format	H.264, MJPEG	
Resolution	4 : 3 Mode - 640 x 480 / 320 x 240 / 160 x 120	
Max. Framerate	Max. 30fps at all resolutions	
Video Quality Adjustment	H.264 : Compression level, Target bitrate level control MJPEG : Quality level control	
Bitrate Control Method	H.264 : CBR or VBR, MJPEG : VBR	
Streaming Capability	Multiple streaming (Up to 10 profiles)	
Audio I/O	Mic/Line in , Line out	
Audio Compression Format	G.711 u-law	
Audio Communication	2-Way	
IP	IPv4, IPv6	
Protocol	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, ONVIF	
Security	HTTPS(SSL) login authentication, Digest login authentication IP address filtering, User access log, 802.1x Authentication	
Streaming Method	Unicast / Multicast	
Max. User Access	5 users at unicast mode	
Memory Slot	Micro, SD/SDHC memory slot	
ONVIF Conformance	Yes	
Webpage Language	English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatian, Hungarian, Greek	
Web Viewer	Supported OS : Windows XP / VISTA / 7, MAC OS Supported Browser : Internet Explorer 7.0 or Higher, Firefox, Google Chrome, Apple Safari	
Central Management Software	NET-i viewer	
ENVIRONMENTAL		
Operating Temperature / Humidity	-10°C ~ +50°C (+14°F ~ +122°F) / 20% ~ 80% RH	
Ingress Protection	IP66 Grade (Waterproof)	
ELECTRICAL		
Input Voltage / Current	12V DC / PoE (IEEE802.3af)	
Power Consumption	Max. 5W	
MECHANICAL		
Color / Material	Ivory / Aluminum	
Dimensions (WxH)	Ø137.0 x 106mm (Ø5.39" x 4.17")	
Weight	770g (1.7lb)	

# SRN-1670D/470D



## 16CH/4CH Network Video Recorder



SRN-1670D



SRN-470D

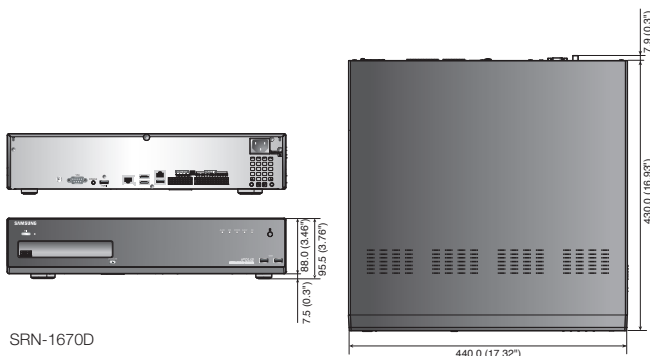


### Key Features

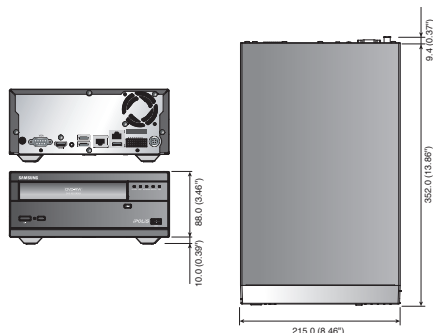
- Full HD resolution support
- H.264, MJPEG dual codec
- 4CIF high resolution images at 480fps(N), 400fps(P) in real-time (SRN-1670D)  
4CIF high resolution images at 120fps(N), 100fps(P) in real-time (SRN-470D)
- DVD writer support

### Dimensions

Unit : mm (inch)



SRN-1670D



SRN-470D

### Technical Specifications

		SRN-1670D	SRN-470D
DISPLAY			
N/W Camera	Inputs	Up to 16CH	Up to 4CH
	Resolution	VGA (640 x 480) / SVGA (800 x 600) / 4CIF (704 x 480) / 1.3M (1280 x 1024) / 2M (1920 x 1080) / 3M (2048 x 1536)	
	Protocols	Samsung	
Live	Multi Screen Display	1 / 4 / 6 / 8 / 9 / 13 / 16, Sequence	1 / 4, Sequence
PERFORMANCE			
Operating System	Embedded	Linux	
	Compression	H.264, MPEG-4, MJPEG	
Recording	Recording Bit Rate	64Mbps	
	Resolution	4CIF (704 x 480) / 1.3M (1280 x 1024) / 2M (1920 x 1080) / 3M (2048 x 1536)	
	Mode	Manual, Schedule (Continuous / Event), Event (Pre / Post)	
	Overwrite Modes	Selectable (Stop / Continuous)	
	Pre-alarm	Up to 15sec (5, 10, 15sec) * 4CIF standard resolution	
	Post-alarm	Up to 6hour (5, 10, 20, 30sec, 1, 3, 5, 10, 20min, 1, 2, 3, 4, 5, 6hour)	
Search & Playback	Playback Speed	4CH	
	Resolution	4CIF (704 x 480) / 1.3M (1280 x 1024) / 2M (1920 x 1080) / 3M (2048 x 1536)	
	Search Mode	Date/time, Event, Back up (*All search included preview function)	
	Playback Function	Fast forward / backward, Slow forward / backward, Step forward / backward	
Network	Ethernet	Gigabit Ethernet x 2	
	Transmission Speed	Up to 48Mbps, Unlimited (48M) / 2 / 1.5 / 1Mbps / 800 / 600 / 500 / 400 / 300 / 200 / 100 / 50kbps	
	Bandwidth Control	Automatic	
	Max. Remote Users	Search 3 / Live unicast 10 / Live multicast 20	
	Protocol Support	TCP/IP, DHCP, PPPoE, SMTP, NTP, HTTP, DDNS, RTP, RTSP	
	Monitoring	NET-i viewer, Webviewer	
Storage	Internal HDD	Up to 5 SATA HDDs	Up to 1 SATA HDD
	External HDD	e-SATA interface	
	DVD Writer (Back up)	Yes	
	USB (Back up)	3 USB ports	2 USB ports
	File Format (Back up)	BU (NVR player), EXE (Include player)	
Security	Password Protection	1Admin, 10 Group, 20 User per 1 group, User can be assigned authority for function	
	Data Authentication	Watermark	
INTERFACE			
Monitors	VGA	Analogue RGB 1280 x 1024(60Hz) resolution	
	HDMI	720p/1080p(60Hz) resolution	
Audio	Inputs	N/A (Network audio support, up to 16CH)	N/A (Network audio support, up to 4CH)
	Output	RCA x 1	
	Compression	G.711, G.723.1, G.726	
Alarm	Inputs	Terminal 16 inputs, NO/NC	Terminal 4 inputs, NO/NC
	Outputs	Terminal 4 relay outputs, NO/NC	Terminal 2 relay outputs, NO/NC
	Remote Notification	Notification via e-mail	
Connections	Ethernet	2 RJ-45 10/100/1000 Base-T	
	USB	USB 2.0, 3 ports	USB 2.0, 2 ports
	eSATA	2 ports	
	Application Support	Mouse, Remote controller	
Dome Protocols	Supported PTZ Cameras	Samsung network products (Network PTZ)	
GENERAL			
Electrical	Input Voltage / Current	100 ~ 240V AC $\pm 10\%$ , 50/60Hz, 4 ~ 1.5A	12VDC adaptor, 4A, 100 ~ 250V AC, 50/60Hz, 1.2A
	Power Consumption	Max. 56W (With 1x HDD)	Max. 36W (With 1x HDD)
Environmental	Operating Temperature	+0°C ~ +40°C (+32°F ~ +104°F)	
	Operating Humidity	20% ~ 85% RH	
Mechanical	Dimensions (WxHxD)	440.0 x 88.0 x 430.0mm (17.32" x 3.46" x 16.93")	215.0 x 88.0 x 352.0mm (8.46" x 3.46" x 13.86")
	Weight (2x Hard Disks)	Approx. 7.5Kg (16.53 lb)	Approx. 4Kg (8.82 lb)
	Rack Mount Kit	2ea	N/A
Language	Korean, Japanese, Chinese, English, French, German, Spanish, Italian, Russian, Polish, Czech, Turkish, Netherlands, Portuguese, Swedish, Danish, Thai, Rumania, Serbia, Croatia, Hungarian, Greek (22 Language)		

# License-Free Monitoring/Recording Software

Samsung provides the NET-i viewer, Free CMS (Central Management Software) and the NET-i ware, 4CH recording software to help efficient network security system operation. The software can be accessed easily; downloaded from the corporate HQ website (<http://www.samsungsecurity.com/main.asp>).



## NET-i viewer

The easy way to view, administer and control your Samsung solution

The NET-i viewer allows remote viewing, control and administration of single or multiple site security systems via a PC. Compatible with all Samsung network devices and Digital Video Recorders (DVRs), NET-i viewer provides a centrally managed software platform for both network and analogue products giving the user the opportunity to bring various technologies together into an easy to administer hybrid solution.

### View

- The NET-i viewer supports simultaneous live monitoring with the ability to use up to four monitors which can be used, for example, to view live video, search for recorded video via attached NVRs or DVRs (event, calendar and video clip searching) and display drill-down graphical maps of the entire site.
- If an event or video loss occurs a yellow box appears around the scene in question making it easy for operators to detect potential issues and a two way audio function allows effective communication.

### Control

- Network devices and even analogue devices attached via a DVR, can be controlled using an intuitive Graphical User Interface (GUI). For the PTZ dome cameras, the NET-i viewer provides pan and tilt control with highly accurate "drag-box" zoom, which can also be controlled via a mouse wheel.

### Administration

- The NET-i viewer is extremely easy to set-up and start using straight away with simple network device discovery and device tree structure. Individual cameras can be set-up by accessing their On Screen Display (OSD) menus and camera location icons can be dragged and dropped onto the graphical map to give a full coverage overview of a site.

## NET-i ware

The easy way to control and record solution for the network devices

The NET-i ware is available for 4/8/16/32/64 channel which are the number of network devices that can be connected to the software. The 4CH version of the NET-i ware (SNS-SF004) is free-licensed product and able to download from the corporate website. In addition to the view, control, and administration functions that the NET-i viewer provides, the NET-i ware provides recording and play back functions via a PC across the network.



### Recording

- The NET-i ware provides various recording mode. Not only continuous recording, event based recording including pre/post alarm recording is supported. A type of event that users want to monitor can be selected from a range of pool; motion detection, intelligent video detection, video loss, and alarm signal output.
- An administrator can also decide if they wish to record both video and audio and if certain cameras should be hidden from an operators view.

### Search & Playback

- Recording history can be checked with easy-to-use GUI. Users can search the recorded data by calendar and event. By selecting searched data, users can playback for the time or camera of interest.

### Back up

- The NET-i ware SNS-SF software will automatically backup/archive at a pre-determined time either every day or every week on a per camera basis to a file location of choice.
- The recorded data has a global auto deletion mode as well as an option to automatically overwrite the oldest video when the HDDs are full. Also, users can check the status of the HDDs.

### Alarm Notification

- The automatic sending of an email informing the recipient of the camera name, event type, event time and a snapshot JPEG image of what has triggered an alarm or a camera's motion detection function.



# NET-i viewer

## Central Management Software



### Key Features

- Monitoring software for Samsung video surveillance products
- Up to 64 channels real-time live monitoring simultaneously in single PC
- Support for various video format : H.264, MPEG-4, MJPEG
- Support for various audio format : G.726, G.711, G.723
- Support for various video resolution : megapixel (1M, 2M, 3M), Full HD, 4CIF, Half D1, VGA, CIF
- Powerful E-map based monitoring
- Bi-directional audio communication
- Remote PTZ control and power area zoom (click and go control)
- Support for various search and playback options :
  - : date and time based search
  - : event (alarm, motion, intelligent video) based search
  - : normal playback, backward playback, fast/slow playback, step playback
- Notification in case of event occurring :
  - : highlighting in the border of video window
  - : display event log message in real time
- Back up capability :
  - : manual back up
  - : AVI, REC1, SEC format
- Manual recording (up to 1CH) during 24 hours
- Multi-level user access and authority management
- Support for multi-language user interface
- Automatic search of network cameras for quick and easy configuration
- Easy device management (configuration, firmware upgrade)
- Automatic self upgrade (connection to Samsung upgrade server)

### Technical Specifications

		NET-i viewer (Version : 1.32)
DEVICE		
Supported Device		Network Camera, Encoder, DVR, NVR
Max. Register Device		250
PERFORMANCE		
Video	Supported Format	H.264, MPEG-4, MJPEG
	Supported Resolution	QXGA, UXGA, SXGA, HD, SVGA, 4CIF, Half D1, VGA, CIF, QVGA
Audio	Supported Format	G.711, G.726, G.723
	Functions	Bi-directional audio, listen, transmit client microphone input to remote speakers
Live Monitoring	Multi-monitor	Up to 4 monitors (Follow the recommended system requirement)
	Screen-split Mode	1, 4, 6, 7, 8, 9, 10, 11, 12, 16, 25, 36, 49, 64 (Full-screen)
	PTZ Control	PTZ control (Pan, Tilt, Zoom, Focus, Preset) using mouse Digital zoom in/out on the image, click and go control
	Functions	Automatic device search of network cameras for quick and easy configuration, Device management (Configuration & firmware update), Snapshot / Prints image
Search & Playback	Local (Remote) Playback	Supported
	Search	Search for recordings based on DVR, NVR, Date/time based search, Event (Alarm, Motion, Intelligent video) based search
	Playback Mode	Normal, Forward/Backward, Fast/Slow, Step
	Functions	Snapshot / Prints image
Back up	Local (Remote) Back up	Supported
	Back up	Local storage, back up format (AVI, REC1, SEC)
Event Monitoring	Display	Highlighting in the border of video window, Display event log message in real time, Launches instant player
	Logs	Event (Alarm, Motion, Intelligent video, video loss), Stores user actions by time and cameras and full system operation
MAP Viewer	Display	Camera / Alarm / Sensor on the map
	Number of Map	50maps
	Supports Image	JPEG / BMP / GIF / PNG
	Monitoring	Launches instant player/viewer up to 16CH
User		Admin, Operator, User
Update		Automatic self upgrade (Connection to Samsung upgrade server)
GENERAL		
Language		Total 22 languages support. English, French, German, Spanish, Italian, Russian, Chinese, Japanese, Korean, Turkish, Polish, Czech, Serbian, Romanian, Portuguese, Dutch, Croatian, Hungarian, Greek, Taiwanese, Swedish, Danish
System Requirement (Recommended)		CPU Intel i7 above, RAM 3GB above, Video memory 1GB above, HDD 200GB above, DirectX 8.1 above. Display resolution : 1,280 x 1,024 above, OpenGL compatible, OS : Window XP Professional, Windows 2000 Professional, Windows Vista Home Basic/Premium/Ultimate, Windows 7
System Requirement (Minimum)		CPU Intel Core2Quad 2.5GHz above, RAM 3GB above, Video memory 512MB, HDD 200GB above

\* The entire items are not supported in every device. Some items are not supported in certain devices.

# NET-i ware

## Recording Software



### Key Features

- Recording software for Samsung network cameras
  - : 4 / 8 / 16 / 32 / 64 cameras recording package are available now
  - : recording channel extension is available by channel addition
  - : live video monitoring and search/playback of recorded video by CMS software
- High performance recording : up to 250Mbps
- Triplex operation performance
  - : recording, live video transmission, recorded video transmission
- Support for various recording options
  - : continuous recording
  - : event based recording (including pre/post alarm recording)
    - (motion detection, intelligent video detection, video loss, alarm signal input)
  - : scheduled recording (including holiday setup)
- Notification in case of event occurring
  - : user defined alert sound output
  - : e-mail to pre-assigned receiver
  - : notification to monitoring software (CMS software)
- Event log : system, user access, back up, recording, motion, alarm, video loss, I/V
- Multiple disk allocation and distribution for stable recording
- Multi-level user access and authority management
- Support for multi-language user interface
- Automatic search of network cameras for quick and easy configuration
- Automatic self upgrade (connection to Samsung upgrade server)

### Technical Specifications

		SNS-SF064	SNS-SF032	SNS-SF016	SNS-SF008	SNS-SF004
DEVICE						
Supported Device		Samsung's Network Camera, Encoder				
Max. Register Device		64	32	16	8	4
PERFORMANCE						
Video	Supported Format	H.264, MPEG-4, MJPEG				
	Supported Resolution	QXGA, UXGA, SXGA, HD, SVGA, 4CIF, Half D1, VGA, CIF, QVGA				
Audio	Supported Format	G.711, G.726, G.723				
	Functions	Bi-directional audio, listen, transmit client microphone input to remote speakers				
Record	Performance	250Mbps				
	Record Mode	Continuous, Event (Pre/Post alarm recording), Scheduled recording				
	Quality	10 levels				
	Pre/Post Record Time	Pre : 1 ~ 16CH 60sec, 17~ 32CH 30sec, 33 ~ 64CH 15sec, Post : 1200sec				
LOG		System, User access, Back up, Recording, Motion, Alarm, Video loss, Intelligent video				
Search & Playback		4 user x 4CH				
Playback	Mode	Time, Event, Timeline				
Back up	Manual	DVD/CD, USB HDD, USB flash memory, Back up format : REC1, SEC				
	Schedule	NAS (Network Attached Storage), USB HDD, Back up format : REC1				
Event	E-mail	E-mail transfer at event occurrence				
Monitoring	Preset	Preset move at alarm occurrence				
Storage	Maximum Controller of HDD	24HDDs				
	Supported Device Format	e-SATA				
	Functions	Storage space assigning by each disk, Warning against lower disk space				
System	NIC Support	NIC is selectable by device connection and client connection type				
	SW Status	Device connection, Manual / Schedule recording status				
	Data Security	Login packet encryption				
	Configuration Value	Initialization / Export / Import				
	Functions	Auto power-on record				
User	Time Synchronization	NTP Server, Client				
	User Level	User-defined function				
	Local(Remote) User	Group : 32, User : 32				
	IP Filtering for Remote User	Supported				
Webviewer	Live	Monitoring up to 9channels				
	Search	Time, Timeline (4channels simultaneously)				
Update		Automatic self upgrade (Connection to Samsung upgrade server)				
GENERAL						
Language		English, French, German, Spanish, Italian, Turkish, Russian, Chinese, Japanese, Korean, Polish, Czech, Serbian, Romanian, Portuguese, Dutch, Croatian, Hungarian, Greek, Taiwanese, Danish, Norwegian, Finnish				
System Requirement (Recommended)		CPU : Intel Core i7, RAM : 4GB Video memory : 256MB, 2HDDs(SATA II) above Microsoft .NET Framework 4.0 OS : Windows 2003 Server SP2, Windows 2008 Server				
System Requirement (Minimum)		CPU : Intel Core i3, RAM : 2GB above Video memory : 256MB, 2HDDs(SATA II) above Microsoft .NET Framework 4.0 OS : Windows XP2, Windows 2003 Server SP2, Windows Vista, Windows 2008 Server, Windows 7				

\* Recording channel extension is available by channel addition function.

\* Two or more HDDs (SATA2 7200rpm) should be used for 250Mbps recording performance.

# SMT-1912/1712

19"/17" TFT-LCD Monitor



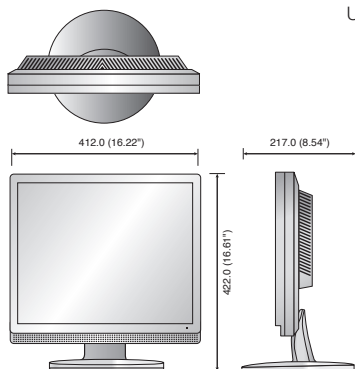
## Key Features

- Support up to 1280 x 1024 resolution
- High contrast ratio 1000 : 1
- Fast response time 5ms
- RGB interface

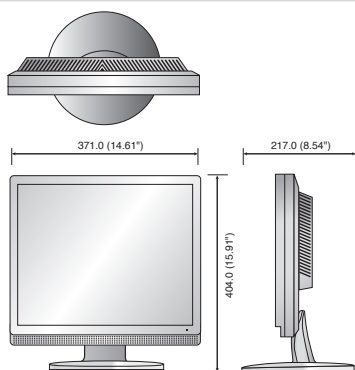
## Dimensions

Unit : mm (inch)

SMT-1912



SMT-1712



## Technical Specifications

		SMT-1912	SMT-1712
DISPLAY			
Screen Size	19"		17"
Max. Resolution	1,280 x 1,024		
Brightness	250cd/m <sup>2</sup>		
Contrast Ratio	1,000 : 1		
Aspect Ratio	4 : 3		
Viewing Angle (H/V)	170° / 160°		
Display Color	16.7million		
Response Time	5ms		
Video System	NTSC / PAL		
Panel Life	40,000hours	50,000hours	
INTERFACE			
RGB / DVI	Connector	1 Analogue RGB 15-pin D-sub	
	Input Signal	0.7 Vp-p (0.5 ~ 1 Vrms)	
	Available Format	640 x 350@70Hz	
		720 x 400@70Hz	
		640 x 480@60Hz/72Hz/75Hz (VGA)	
		800 x 600@56Hz/60Hz/72Hz/75Hz (SVGA)	
		1,024 x 768@60Hz/70Hz/75Hz (XGA)	
		1,152 x 864@75Hz	
		1,152 x 870@75Hz	
		1,280 x 720@60Hz	
1,280 x 960@60Hz			
1,280 x 1,024@60Hz/75Hz (SXGA)			
Application Support	Remote controller		
ON SCREEN DISPLAY			
Functions	VESA™ DPM compatible		
Language	English, Spanish, French, German, Italian, Portuguese, Dutch, Russian, Swedish, Chinese, Japanese, Korean		
GENERAL			
Electrical	Input Voltage	100 ~ 240V AC (50/60Hz)	
	Power Consumption	Type 19.5W	Type 17.5W
Environmental	Operating Temperature	0 ~ +40°C (+32°F ~ +104°F)	
	Operating Humidity	10% ~ 80% (Non-condensing)	
Mechanical	Dimensions with Stand (WxHxD)	412.0 x 422.0 x 217.0mm (16.22" x 16.61" x 8.54")	371.0 x 404.0 x 217.0mm (14.61" x 15.91" x 8.54")
	Dimensions without Stand (WxHxD)	412.0 x 361.0 x 70.0mm (16.22" x 14.21" x 2.76")	371.0 x 331.0 x 70.0mm (14.61" x 13.03" x 2.76")
	Weight	5.5Kg (12.13 lb)	4.9Kg (10.8 lb)
	LCD Protection Glass	Yes	
	Cabinet Color	Black	
	VESA Mounts Interface	100 x 100mm	

# SMT-1923/1723

19"/17" TFT-LCD Monitor

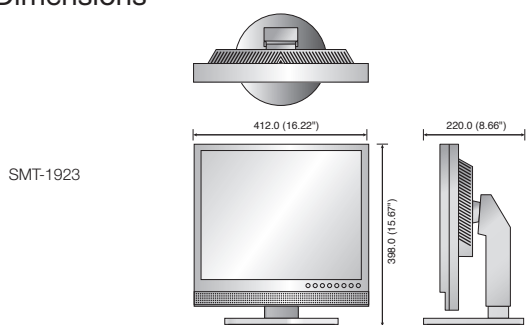


## Key Features

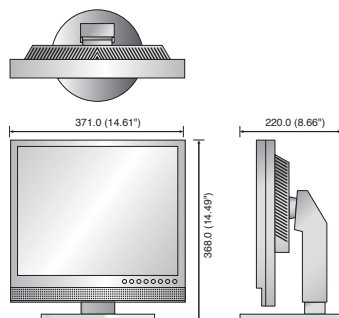
- Support up to 1280 x 1024 resolution
- High contrast ratio 1000 : 1
- Fast response time 5ms
- 120Hz motion technology
- RGB / BNC / S-Video interface

## Dimensions

Unit : mm (inch)



SMT-1923



SMT-1723

## Technical Specifications

	SMT-1923	SMT-1723
<b>DISPLAY</b>		
Screen Size	19"	17"
Max. Resolution	1,280 x 1,024	
Brightness	250cd/m <sup>2</sup>	
Contrast Ratio	1,000 : 1	
Aspect Ratio	4 : 3	
Viewing Angle (H/V)	170° / 160°	
Display Color	16.7million	
Response Time	5ms	
Video System	NTSC / PAL	
Panel Life	40,000hours	50,000hours
Filter Type	3D combfilter	
<b>INTERFACE</b>		
Video	Connector	BNC types (2 in / 2 out)
S-Video	Connector	1CH input (Y/C), Loop through out
	Connector	1 Analogue RGB 15-pin D-sub
	Input Signal	0.7 Vp-p ±5%
RGB / DVI	Available Format	720 x 400@70Hz
		640 x 480@60Hz/72Hz/75Hz (VGA)
		800 x 600@56Hz/60Hz/72Hz/75Hz (SVGA)
		1,024 x 768@60Hz/70Hz/75Hz (XGA)
		1,152 x 864@75Hz
		1,280 x 720@60Hz
Audio	Connector	2 RCA type (2 Stereo inputs)
	Output Signal	Speakers : 2 x 1W
Application Support		Remote controller
<b>ON SCREEN DISPLAY</b>		
Functions		Motion technology (120Hz), VESA™ DPM compatible, PIP/PBP
Language		English, Spanish, French, German, Italian, Portuguese, Dutch, Russian, Swedish, Chinese, Japanese, Korean
<b>GENERAL</b>		
Electrical	Input Voltage	12V DC (External power supply)
	Power Consumption	Type 26W      Type 23W
Environmental	Operating Temperature	0 ~ +40°C (+32°F ~ +104°F)
	Operating Humidity	20% ~ 90% (Non-condensing)
Mechanical	Dimensions with Stand (WxHxD)	412.0 x 398.0 x 220.0mm (16.22" x 15.67" x 8.66")
	Dimensions without Stand (WxHxD)	412.0 x 361.0 x 69.0mm (16.22" x 14.21" x 2.72")
	Weight	6.85Kg (15.1 lb)
	LCD Protection Glass	Yes
	Cabinet Color	Black
	VESA Mounts Interface	100 x 100mm